Reviewing Nurturing Families Network through the Results-Based Analysis Lens 2013, 2014, 2015

Compilation of Reports by Center for Social Research
presented to the

Office of Early Childhood, Division of Family Support Services

February 23, 2015



UNIVERSITY OF HARTFORD

COLLEGE OF ARTS AND SCIENCES

Ms. Karen Foley-Schain, MA, M.Ed., LPC Family Support Services Director Office of Early Childhood 165 Capitol Avenue Hartford, CT 06015

Dear Ms. Foley-Schain:

This compilation of reports, Reviewing Nurturing Families Network through the Results-Based Analysis (RBA) Lens, examines Connecticut's Nurturing Families Network home visiting program, using the RBA framework. In accordance with Connecticut's General Assembly Appropriation Committee, results-based accountability provides a framework to show where a program has been, and a forecast of where the program is going (Friedman, 2005). This compilation of reports is intended to provide insight on program policy development of Nurturing Families Network, a statewide program funded and administered by the Office of Early childhood. Using indicators of performance, trends, shown over time, demonstrate the effectiveness of the program which is operating among 40 sites, including all 29 CT birthing hospitals. In addition, the narrative on each figure, "story behind the baseline", provides a context of the program evaluation measures as well as an explanation on overall program impact.

Per the contract agreement between the Center for Social Research (CSR) of the University of Hartford and the Division of Family Support Services at the Office of Early Childhood, a special NFN report is due each January. For this year, the RBA's created for the previous three years, 2013-2015 are compiled for this report. For each of the RBA reports, performance measures are organized according to the following indicators:

- * "How much did *Nurturing Families Network* do?"
- * "How well is *Nurturing Families Network* doing?"
- * "Is anyone better off as a result of utilizing *Nurturing Families Network?*"

Nurturing Families Network supports the State of Connecticut goal, "All Connecticut children, birth to age 9 grow up in a stable environment, safe, healthy, and ready to succeed" (CGA.CT.GOV). In order to reach this quality of life standard, NFN program implements an evidenced-based home visiting model best practices to promote positive parenting and prevent child abuse and neglect. We measure quality of life using indicators of program performance each year. This report reflects services to first time mothers In addition to providing services to first-time mothers, NFN has added an in-home therapy component for mothers who are diagnosed with Major Depression. Further, since 2009, NFN has provided homevisiting services for fathers. The reports document that the program reaches the intended target population and, after one year of program participation, trends on measures of rigid parenting attitudes and connection to community resources, continue to move in the desired direction.

We appreciate the opportunity to work with the Office of Early Childhood, we hope that the report will inform policy development by focusing on the "ends, not the means" (Friedman, 2005) for all Connecticut residents.

Sincerely,

Allison R. Joslyn Project Manager Center for Social Research University of Hartford C. Wesley Younts, Ph.D. Associate Professor & Director Center for Social Research Department of Sociology and Criminal Justice University of Hartford Marcia Hughes, Ph.D. Research & Evaluation Analyst Center for Social Research University of Hartford

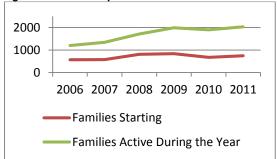
Quality of Life Result: Young children in Connecticut will have quality parental care that meet their needs and will be healthy, developmentally on track, and ready to learn.

Partners: Since program inception, Nurturing Families Network infrastructure expanded from 2 to 42 sites, operating with all 29 birthing hospitals, and is partnered with dozens of public and private service centers across the state of Connecticut.

How Much Did We Do?

Increase in number of families served each year and comparative number of families enrolling in home visiting services per year.

Figure 1. NFN Participation Rates: 2007-2011



Story behind the baseline: Along with an increase in the number of NFN sites, the number of families enrolling in home visiting services has increased from 563 in 2006 to 743 families in 2011. Additionally, the number of families served in home visiting has risen more than 69% from 2006 to 2011, with 1,201 participants in 2006 to 2,034 participants in 2011. There was a slight drop in rates of participation in 2010 compared to 2009, which is likely related to the uncertainty of the state budget impacting sites, with an accompanying loss of staff (3 times more new staff were trained in 2010 compared to 2008) and consequently fewer participants.

Trend: ▲

How Well Did We Do It?

Figure 2. Participation in IH-CBT Trial (2009-2011)

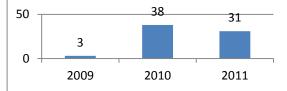


Figure 3. Fathers receiving NFN HV per year: 2009-2011

100
50
31
40
2009
2010
2011

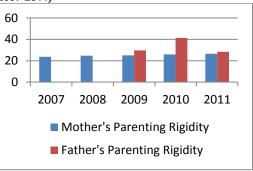
Story behind the baseline: A randomized control trial to test the effectiveness of in-home cognitive behavioral therapy (IH-CBT) for NFN first-time mothers with major depression was conducted from 2009 through 2012. Findings from the study will be relevant to public health because IH-CBT (1) has the potential to reach a sizable population of depressed mothers who typically do not receive effective mental health treatment; (2) can significantly enhance the benefits derived from home visitation services for both mother and child; and (3) is readily adaptable for dissemination.

Additionally, the father home visiting program initiative has expanded from a pilot program in 2009 to providing home visiting services to fathers in 11 sites. Figure 3 shows an increase in the number of father participants served per year.

How Well Did We Do It?

The program was successful in screening and reaching its target population: high-risk mothers and fathers. Figures 4 and 5 shows data on participants' parenting rigidity and levels of parental stress.

Figure 4. Parenting Rigidity: Mothers and Fathers (2007-2011)

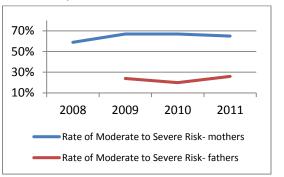


Story behind the baseline: Scores on the Child Abuse Potential Rigidity (CAPI-R) subscale indicate the level of rigid parenting attitudes, and consequently risk for maltreating children. The average score for a normative population on the CAPI-R is 10.1 with a standard deviation of 12.5. The data in Figure 4 shows that NFN mothers (average score of 27) and fathers (average score of 32) come into the program with CAPI-R scores more than twice the normative score (i.e. 10), indicating extremely high-risk populations. CAPI-R outcomes are shown in figure 8 page 3.

Trend: ▲

Quality of Life Result: Young children in Connecticut will have quality parental care that meet their needs and will be healthy, developmentally on track, and ready to learn.

Figure 5. NFN Mothers and Fathers Rate of Moderate to Severe Family Stress: 2008-2011



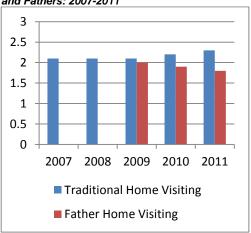
Story behind the baseline: Rates of moderate to severe family stressors as measured by the Kempe Family Stress checklist, are presented in Figure 5. These data show that over 60% of mothers score between the moderate to severe range in the scale in areas of multiple stress, childhood history of abuse/ neglect, social isolation/ depression, and history of crime and substance abuse. While fathers report lower rates of moderate to severe stress overall compared with mothers, their stressor's are higher among areas in financial stability and living situations, and are comparable to rates of mother's own history of abuse/ neglect. Although we see a slight drop in overall stress for fathers in 2010, there is no decrease in CAPI-R entry scores (see Figure 4). Participating families are struggling with financial strains, social isolation, past trauma, and criminal histories.

Trend: ▲

How Well Did We Do It?

NFN home visitors provided intensive home visiting services to mothers and fathers.

Figure 6. Number of Home Visits Per Month for Mothers and Fathers: 2007-2011



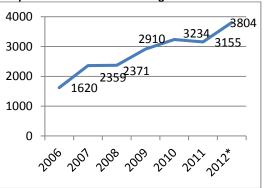
Story behind the baseline: Program services consist mostly of home visits and, on average, families receive 2 home visits per month out of an attempted 3. Data on frequency of home visitation in Figure 6 indicate that mothers are seen in the home at least twice per month, with an average of 2.3 times a month in 2011. Fathers were seen in the home a comparable (although slightly less) amount of times, an average of 1.8 visits per month in 2011. Rates of program participation have remained stable while meeting program goals.

Trend: ▲

How Well Did We Do It?

Home visitors conduct developmental screens of NFN children.

Figure 7. Number of Ages and Stages Questionnaires Completed on NFN Home Visiting Children: 2006-2012



*2012 data through November only

Story behind the baseline: In addition to a focus on preventing child abuse and neglect, NFN home visitation also focuses on child development outcomes. During home visits, NFN home visitors and families complete the Ages and Stages Questionnaire to screen children for possible developmental delays. Data from January 2006 through November 2012, shown in Figure 7, show a continuous increase in the number of ASQ screens completed, with 3,804 screens completed for 1,273 children in 2012.

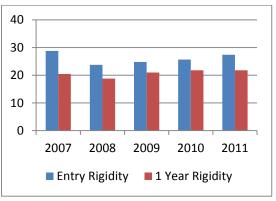
Trend: ▲

Quality of Life Result: Young children in Connecticut will have quality parental care that meet their needs and will be healthy, developmentally on track, and ready to learn.

Is Anyone Better Off?

Mothers participating in NFN show less rigid parenting attitudes over the first year of program services.

Figure 8. Parenting Rigidity Outcomes After 1 Year of NFN Program Participation



Story behind the baseline: Families participating in NFN home visiting show significant reductions on the rigidity subscale of the CAPI-R within 1 year of program participation. These data indicate that families have less rigid parenting attitudes and are less likely to treat their children forcefully.

Reported NFN annualized rates of maltreatment for 2005 through 2009 show that rates of substantiated abuse and neglect ranged from 4.4% (the highest) in 2007 to 1.3% (the lowest) in 2008, with 2009 rate of 2%. These rates are very low when compared with rates of 20-25% reported in studies with similarly high-risk groups that did not receive home visitation services in the state of Connecticut.

Trend: ▲

Is Anyone Better Off?

Education and Employment rates for mothers increase after 1 year.

Figure 9. Percentage of Mothers with a High School Education at entry and 1 year enrollment

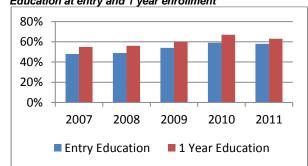
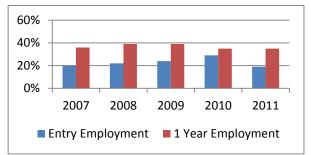


Figure 10. Percentage of Mothers Employed

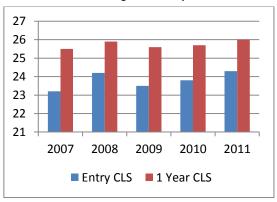


Story behind the baseline: Of all mothers entering NFN, 76% to 81%, are unemployed while facing social and cultural barriers. Home visitors emphasize a multi- generational approach: support for both mother's and children's developmental trajectory. After the first year of program participation, mothers show significant increases in employment and education; over 55% of participating mothers in the past 5 years received at least a high school education and 35% of these same mothers were employed after the first year of program participation. These outcomes suggest that home visitors are helping families to build foundations to become more self-sufficient.

Is Anyone Better Off?

Mothers participating in NFN show improvement in managing resources in community over the first year of program services.

Figure 11. Parenting Community Life Skills Outcomes After 1 Year of NFN Program Participation



Story behind the baseline: Mothers participating in NFN home visiting show significant increases on the Community Life Skills measure (CLS) within 1 year of program participation for all 5 years, as shown in Figure 11. This indicates that mothers are more knowledgeable on available community resources and have improved their navigation of these resources. In addition, mothers are more consistent in their daily routine. Mothers, who participate in NFN for one, two, three, four, and five years and who have completed the CLS for each year of participation, show significant positive change, indicating families have increased their knowledge and utilization of community resources.

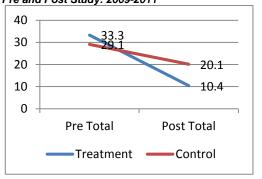
Trend: ▲

Quality of Life Result: Young children in Connecticut will have quality parental care that meet their needs and will be healthy, developmentally on track, and ready to learn.

Is Anyone Better Off?

Depressed NFN mothers participating in inhome cognitive behavioral therapy have significantly lower rates of depression

Figure 12. Mothers' Beck Depression Inventory Scores Pre and Post Study: 2009-2011

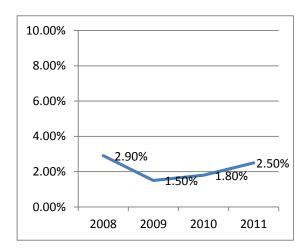


Story behind the baseline: The NFN program conducted a randomized clinical trial to test the effectiveness of in-home cognitive behavioral therapy for depressed mothers in NFN. Post-test scores on the Beck Depression Inventory were significantly (F=11.4, p=.002) lower for mothers participating in the treatment group as compared to mothers in the control group.

Is Anyone Better Off?

A smaller percentage of NFN children are identified having potential developmental delay compared to а normative population.

Figure 13. Percentage of NFN Children Identified As Having a Potential Delay on the Ages and Stages Questionnaire



Story behind the baseline: Home visitors screen all children in the NFN program for developmental delays and social and emotional problems. In 2012 they completed 3,804 screens using the Ages and Stages Developmental Monitoring Measure. Each year only a small percentage of the children show a "red flag" for a developmental delay. The rates for the past 4 years have ranged from 1.5% to 2.9%. This compares favorably to the approximately 13% of young children nationwide who show developmental delays.

Trend: ▲

Trend: ▲

Proposed Actions to Turn the Curve:

Despite the state's fiscal challenges, the NFN program continues to increase its capacity to recruit and retain high-risk populations of parents and provide them with intensive home visiting services. We see positive outcomes in parenting rigidity and their ability to navigate daily routines.

Moreover, there have been new initiatives to serve special populations of parents. In-home cognitive behavioral therapy has expanded and is offered to mothers with depression in NFN sites statewide. In addition, there are now fathering home visitors in 11 NFN sites statewide. There is also a process study underway to better understand these services being provided to fathers. Finally, a study focusing on child outcomes is starting in February 2013. The information from these projects will help inform the implementation of NFN program services and maximize outcomes for parents and children.

In efforts for continuous quality improvement, we have developed a web-based database, the Children's Trust Fund Data System (CTFDS), to track families through their participation in Nuturing Families Network.

During the implementation of the new web-based data system, the CTF can assess NFN program implementation, utilization, and effectiveness as a whole, statewide, as well as each of the individual sites in 'real time.' The database also provides the capacity to document the linkages between the Nurturing Connections and home visiting components of NFN, which will help determine the most effective recruitment strategies. Information gleaned from the database will be used to analyze the context of the NFN program in the state and describe how the program is linked with other services in the community.

Quality of Life Result: Young children in Connecticut will have quality parental care that meet their needs and will be healthy, developmentally on track, and ready to learn.

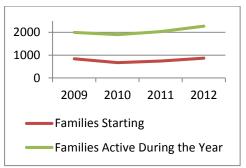
Contribution to the Result: Improve parenting skills and prevent rates of abuse and neglect.

Program Expenditures	State Funding	Federal Funding	Other Funding	Total Funding
Actual FY 13				
Estimated FY 14				

Partners: Nurturing Families Network infrastructure includes 40 sites operating within all 29 birthing hospitals and partners, with dozens of public and private service centers.

How Much Did We Do?

NFN Participation Rates: (2007 - 2012)

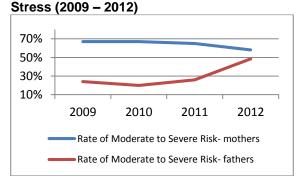


Story behind the baseline: This performance measure examines the rate of families enrolling in NFN and the rate of active participation each year. Along with an increase in the number of NFN sites, the annual number of families enrolling in home visiting services has increased from 572 in 2007 to 865 families in 2012. Additionally, the number of families served in home visiting per year rose more than 69% from 2007 to 2012, with 1,342 participants in 2007 to 2,273 participants in 2012. There was a slight decrease in rates of participation in 2010 compared to 2009, which is likely related to the state budget uncertainty affecting sites, with an accompanying loss of staff (3 times more new staff were trained in 2010 compared to 2008) and consequently fewer participants.

Trend: ▲

How Well Did We Do It?

Rates of Moderate to Severe Family

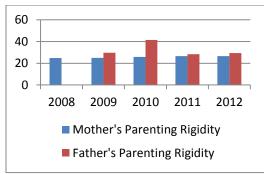


Story behind the baseline: Rates of moderate to severe family stress, as measured by the Kempe Family Stress checklist, are presented in Figure 5. These data show that over 58% of mothers score between the moderate to severe range in areas of multiple sources of stress including childhood history of abuse and neglect, social isolation, depression, and history of crime and substance abuse. With the engagement of more fathers entering NFN, fathers' rates of overall stressors increased for areas of multiple stresses, and history of crime, substance abuse, and mental illness, which are comparable to rates of mother's own history of abuse and neglect. NFN was successful in screening and reaching its target population.

Trend: ▲

How Well Did We Do It?

Parenting Rigidity: Mothers and Fathers (2008 – 2012)



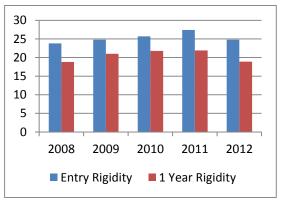
Story behind the baseline: Program efforts are reaching and enrolling the target population as displayed by the Child Abuse Potential Rigidity (CAPI-R) subscale at program entry, one several measures NFN employs. Scores on the CAPI-R subscale indicate the level of rigid parenting attitudes, and consequently risk for maltreating children. The average score for a normative population on the CAPI-R is 10.1 with a standard deviation of 12.5. The data shows that NFN mothers (average score of 27) and fathers (average score of 32) come into the program with CAPI-R scores more than twice the normative score (i.e. 10), indicating extremely high-risk populations.

Trend: ◀▶

Quality of Life Result: Young children in Connecticut will have quality parental care that meet their needs and will be healthy, developmentally on track, and ready to learn.

Is Anyone Better Off?

Parenting Rigidity Outcomes after 1 Year of NFN Program Participation



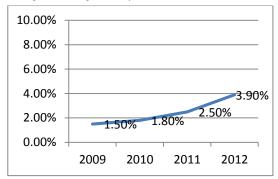
Story behind the baseline: Families participating in NFN home visiting show significant reductions on the rigidity subscale of the Child Abuse Potential Inventory (CAPI-R) after 1 year of program participation with a difference in average score of at least -4.0.

An analysis of CAPI-R data was performed for mothers who scored at or above the cut-off score, and those who scored below the cut-off score at program entry. The high-risk rigid attitudes subgroup (entry scores at or above the cut-off score of 30) that continued NFN services for 1 year between 2008 and 2012 program years (N=585) scored significantly lower after 1 year of participation ($t=9.7,\,p<.001$). These subgroup scores dropped below the cut-off, indicating a decrease in rigid parenting attitudes for families who experience multiple stressors. Additionally, father's change in mean scores on the CAPI-R decreased 5.2 after one year of program participation.

Trend: ▲

Is Anyone Better Off?

Early Identification of NFN Children with a Potential Delay on the Ages and Stages Questionnaire (preventing cumulative costs related to education, mental health, and juvenile justice).



Story behind the baseline: According to the CDC, approximately 13% of children are diagnosed with a developmental disability nationwide. NFN program aims to provide all participating children screens for early detection of developmental delays through the Ages and Stages Questionnaire. Experts agree that early detection of at-risk children offers the best hope for early intervention and optimal outcomes.

The figure displays the increase in the rate of children identified with a potential delay through the screen. Following the result of the screen, NFN home visitors and clinical supervisors provide proper support through referrals according to the child's need. In 2012, families and home visitors completed 4,303 screens using the Ages and Stages Developmental Monitoring Measure. Each year only a small percentage of the children show a "red flag" for a developmental delay. The rates for the past 4 years have ranged from 1.5% to 3.9%.

Trend: ▲

Proposed Actions to Turn the Curve:

New initiatives are incorporated in NFN to serve special populations of parents. In-Home Cognitive Behavioral Therapy (IHCBT) is offered to mothers with depression at NFN sites in every region of the state (Note: Results of a study on IHCBT were shared in 2013). In addition, there are now fathering home visitors in 10 NFN sites and 11 more were added with new federal funds. There is also a process study underway in order to understand the services being provided to fathers. Finally, recruitment of participants for a study focusing on child outcomes started in August 2013. The information from these projects will help inform and improve the implementation of NFN program services and capitalize on home visiting efforts for mothers, fathers, and children.

Data Development Agenda:

The implementation and continued development of a web-based data system, the Children's Trust Fund Data System (CTFDS), began in fall 2012 for NFN. CTF staff offer an infrastructure of education, technical assistance, and support, which includes facilitation of a webinar. telephone, email and on-site support related to navigating and the functions in CTFDS for NFN program staff. CTFDS is used to track families and measure outcomes for families participating in Nurturing Families Network. The web-based data system facilitates uniform efficient documentation and tracking of individual and case specific information, and allows for 'real time' monitoring of NFN program implementation and outcomes. The system allows for a deeper insight toward quality assurance and information to support evidence toward program improvements.

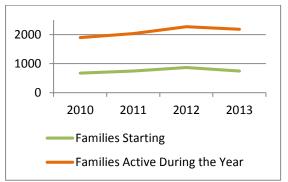
Quality of Life Result: Young children in Connecticut will have quality parental care that meet their needs and will be healthy, developmentally on track, and ready to learn.

Contribution to the Result: Improve parenting skills and prevent rates of abuse and neglect.

Program Expenditures	State Funding	Federal Funding	Other Funding	Total Funding
Actual FY 14				
Estimated FY 15				

Partners: Nurturing Families Network infrastructure includes 38 sites operating within all birthing hospitals, and partners with dozens of public and private service centers.

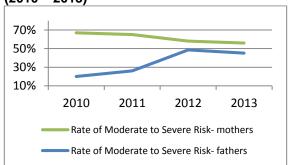
How Much Did We Do? NFN Participation Rates: (2010 – 2013)



Story behind the baseline: This performance measure examines the volume of families enrolling and the number of families served in Nurturing Families Network PAT home visiting services each year. The annual number of families enrolling in home visiting services has increased from 672 in 2010 to 746 families in 2013, an 11% increase. Additionally, the number of families served in NFN home visitation per year rose approximately 14.9% from 2010 to 2013, with 1,897 participants in 2010 to 2,181 participants in 2013. Furthermore, 244 fathers enrolled in NFN since father home visiting in 2009.

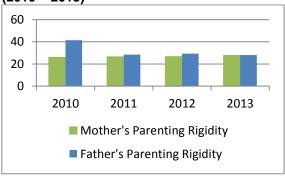
The slight decrease of families enrolling in the program from 2012 to 2013 is in part is likely due to retention of families in the program.

How Well Did We Do It? Rates of Moderate to Severe Family Stress (2010 – 2013)



Story behind the baseline: Rates of moderate to severe family stress, as measured by the Kempe Family Stress Checklist, are presented. These data show that over 56% of mothers score between the moderate to severe range in areas of multiple sources of stress including childhood history of abuse and neglect, social isolation, depression, and history of crime and substance abuse. Additionally, as more fathers enter in the father home visiting program each year, scores ranging from moderate to severe stressors and risk are increasing from 20% in 2010 to 45% in 2013, in areas of multiple stressors, history of crime, substance abuse, and mental illness. This proxy denotes that screening for NFN program eligibility continues to be successful in reaching its target population.

How Well Did We Do It? Parenting Rigidity: Mothers and Fathers (2010 – 2013)



Story behind the baseline: One of many measures NFN employs at program entry, 6 months, and each consecutive year of involvement is the Child Abuse Potential Rigidity (CAPI-R) subscale. CAPI-R subscale scores indicate the level of rigid parenting attitudes, which is positively correlated with risk for maltreating children. The average score for a normative population on the CAPI-R is 10.1. The average scores demonstrate that NFN home visiting services are enrolling families in need of support for parent education and case management. Over the course of four years entering NFN participating mothers scored an average between 25.9 to 27.8, and, since father home vising service inception and refining recruitment efforts, fathers score an average of 41.4 to 28.1 at program entry.

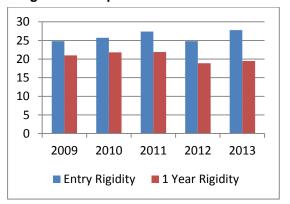
Trend: ◀▶

Trend: ▲ Trend: ▲

Quality of Life Result: Young children in Connecticut will have quality parental care that meet their needs and will be healthy, developmentally on track, and ready to learn.

Is Anyone Better Off?

Parenting Rigidity Outcomes after 1 Year of NFN Program Participation



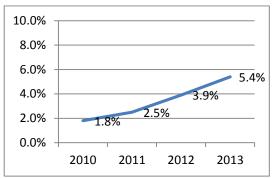
Story behind the baseline: Families participating in NFN home visiting show significant reductions on the rigidity subscale of the Child Abuse Potential Inventory-Rigidity (CAPI-R).

As part of measuring program effectiveness, the CAPI-R is used to identify parent attitudes toward the behaviors and appearances of children on a continuum of rigidity. A score of 30 or more is considered an indication of higher risk, and is generally exemplified by expecting children to rigidly fit into a mold. While only 5% of the general population score above a 30, nearly half of NFN parents that enroll in the program possesses a higher than average level of rigid parenting attitudes compared to the general public. However, a statistically significant decreases was found after one year of participation in NFN, parents' scores, indicating progress in their development of (reduced rigidity and thus, risks for maltreatment) expectations of their children.

Trend: ▲

Is Anyone Better Off?

Early Identification of NFN Children with a Potential Delay on the Ages and Stages Questionnaire



Story behind the baseline: According to the CDC, approximately 13% of children are diagnosed with a developmental disability nationwide. The NFN program completes child developmental screens for all participating children using the Ages and Stages Questionnaire. Experts agree that early detection of atrisk children offers the best hope for early intervention and better trajectories of well-being; preventing cumulative costs related to education, mental health, and juvenile justice systems.

The figure displays the increase in the rate of children identified with a potential delay on the ASQ screen. In 2013, families and home visitors completed 4,242 screens using the Ages and Stages Developmental Monitoring Measure. Each year only a small percentage of the children show a "red flag" for a developmental delay. The rates for the past 4 years have ranged from 1.8% to 5.4%. Following the result of the screen, NFN home visitors and clinical supervisors offer to facilitate customized support and connections to referrals such as Birth to Three or other provider services.

Trend: ▲

Proposed Actions to Turn the Curve:

The Continuous Quality Improvement team, which includes elected representatives of program staff, OEC leaders, and evaluators, was regenerated to provide a forum to discuss program needs, improve standards, and integrate research-driven program practices. To further enhance program operations, network meetings are incorporated as part of CQI process in which the elected officials of program peers assist as conductors of information to and from CQI.

Program leaders will conduct site visitations in which site specific data is utilized to inform individualized program plans toward improvement and optimize successes.

The NFN program leaders commission several special projects, which provide insight on best practices in delivering services that capitalize on home visiting efforts for mothers, fathers, and children. These special projects include studies on father home visiting services, a child outcome study, and an expansion of In-Home Cognitive Behavior Therapy model offered by licensed mental health

Family Support Service Division of the OEC continues to expand capacity for home visiting through federal and state (Nurturing Families Network) funding in which OEC is leading efforts in expanding access and opportunities for CT families toward connection services: Child First; Early Head Start; Nurse Family Partnership; and PAT Nurturing Families Network services.

Data Development Agenda:

The implementation of a web-based data system began in 2012. Program staff provides technical assistance, and support, to funded NFN programs. Uniform documentation and program reports are a key feature to monitor service delivery and program outcomes.